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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,277	03/29/2001	Srinivas Gutta	US 010098	4455

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P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

RAMAN, USHA

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/821,277	Applicant(s) GUTTA ET AL.	
	Examiner Usha Raman	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) 2-11 and 17-22 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1, 12-16 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 22nd 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed June 22nd 2006 have been fully considered but they are not persuasive.

Applicant's arguments stating that, "Vamparys fails to disclose that the program recommendations are based on implicit and explicit data where the method used for determining program recommendation based on implicit data are different than the method used for determining program recommendations based on explicit data". However the examiner respectfully disagrees. Vamparys discloses using a *content based engine* for generating recommendations on implicit data and is different from the engine used to generate recommendations based on explicit data (i.e. the *collaborative engine*). See page 16 lines 19-23. sAs a result, the rejection is maintained.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 12-14, and 16 are rejected under 35 U.S.C. 102(a) as being anticipated by Vamparys (WO 01/15449).

With regards to claim 1, Vamparys discloses a method for recommending television programs comprising the steps of:

Obtaining a list of one or more television programs (program metadata sent to profiling server; see page 8, lines 18-21)

Providing the list of programs to at least three different program recommenders R1 (706), R2 (708), R3 (710) (see figures 7 and 8, and description in page 15, lines 19-page 16, lines 11 and page 17, line 25-page 18 line 3), each of the recommenders using a different stochastic methods (see page 16, lines 19-23, page 17, lines 17-21, page 18 lines 15-19);

Obtaining a user profile (i.e. a customized recommendation list) from each of the three different program recommenders, R1, R2, and R3; (each of the recommenders generates a aggregate recommendation list for the user; see page 19, lines 2-4)

Obtaining for each program on said list, a set of recommendation scores S1 (712), S2 (714) and S3 (716) from each of the said recommenders, R1, R2, and R3 (see page 6, lines 1-4 and page 16, lines 3-5), the respective score from set of recommendation scores S1, S2, and S3 corresponding to a respective user profile (see figure 7 and page 6, lines 1-4)

Generating for each program on the list, a combined recommendation score, C, computed by applying a voting process (unique recommendation per program is generated from the aggregated list from weighted recommendations, thereby a voting is applied) to each of the recommendation scores, S1, S2, and S3; (see page 6, lines 1-4,)

Recommending the program to a user, by presenting the combined recommendation score, C to the user (see page 8, lines 22-24)

With regards to claim 12, Vamparys discloses a method of recommending television programs, comprising:

Obtaining a listing of one or more television programs (see page, lines 18-21);

Obtaining a plurality of user profiles from the list of one or more television programs (plurality of customized recommendation lists obtained from a filtering engines, see page 19, lines 13-15);

Obtaining at least an explicit recommendation score, E, for one or more television programs corresponding to a first user profile of the plurality of user profiles (recommendation list generated by the collaborative filtering engine (708), weighted by the weight coefficient 714, see page 16, lines 21-24, page 17, lines 3-7, and figure 7) using a first stochastic method (i.e. rules of collaborative filtering engine);

Obtaining at least an implicit recommendation score I, for one or more television programs corresponding to a second user profile of said plurality of the user profiles (recommendation list (830) generated based on user monitoring data

using engine (820), and weighted by the weight coefficient (828), see page 13, lines 7-8, page 14, lines 18-21, page 18, lines 3-6 and figure 8) using a second stochastic method (rules of monitoring matching engine 820);

Obtaining at least a feedback recommendation score, F for one or more television programs corresponding to a third user profile of said plurality of user profiles (recommendation list (832) generated based on user tastes (i.e. explicit user feedback defining user tastes) by the filtering engine (814) and weighted by coefficient 822, see page 12, lines 13-14, page 14, lines 18-21, page 19 lines 4-8) using a third stochastic method (rules of taste matching engine 814), the first, second and third stochastic methods being different from each other (see page 16, lines 21-23 and page 18, lines 14-19);

Generating for each television program, of said plurality of user profiles, a combined recommendation score, C, based on applying a voting process to each of the explicit recommendation score, the implicit recommendation score, and the feedback recommendation score (see page 6, lines 1-4, page 15, lines 23-page 16, line 2, wherein the aforementioned recommendation lists are aggregated, step 718 in figure 7); and

Recommending the combined recommendation score, C, to a user by presenting the combined recommendation score, C, to the user (see page 8, lines 22-24).

With regards to claim 13, Vamparys teaches that the voting process is based on stochastic process (see page 16, lines 12-23, "the heuristic algorithm")

With regards to claim 14, Vamparys teaches that the stochastic method comprises a memory based learning process and a rule based learning process (see page 16, lines 5-11)

With regards to claim 16, Vamparys teaches that the combined recommendation score (aggregation of the recommendations, see page 15, lines 23-page 16, line 2) enables the user to select a television program of interest (see page 15, lines 13-15)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vamparys (WO 01/15449).

With regards to claim 15, Vamparys does not explicitly teach said stochastic methods are combined according to a combination scheme comprising a unison scheme, a majority scheme, a trust scheme, an averaging scheme or mixtures thereof. Vamparys does however teach that the stochastic method comprises a memory based learning process and a rule based learning process. When the coefficients are added to each respective program recommendation of each filtering engine (see pg. 16 lines 4-5), clearly a rule based learning process in combination with a memory based learning process is employed because of the fact that certain filtering engines give better results with a certain content category, the appropriate

coefficients are used with each respective filtering engine (a rule based learning process).

Examiner takes Official Notice that both the concepts and advantages of using a combination scheme comprising an averaging scheme were well known and expected in the art at the time the invention was made.

It would have been obvious to one with ordinary skill in the art to have used a combination scheme such as an averaging scheme in the Vamparys teaching in order to combine the memory based learning stochastic process and the rule based learning stochastic process. An averaging scheme can be used in order to average the result of the memory based learning process with the result of the rule based learning process to provide a combined result. One would have been motivated to use the combination schemes mentioned above in order for the recommendation engine to choose more appropriate coefficient factors which will result in a more accurate television program recommendation.

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600